exclusively, meaning that the patient makes regular voluntary movements, which are resisted by the physician or operator. These movements are fully illustrated by a series of thirty-seven plates. For the baths, which must be given in wooden or porcelain tubs, ordinary American sea-salt is preferred, because benefit is obtained from the iodides and bromides which it contains. To each pound of this, one and one-half ounces of calcium chloride are added. The carbon dioxide gas, which is added after two or three baths have been taken, is obtained from the action of sodium bisulphate, commonly known as the acid sulphate, upon sodium bicarbonate, such a quantity being employed that ½ to 1 per cent. gas solution is obtained. The duration of the immersion is from four to twenty minutes, but no longer. The temperature should not exceed 95°, nor go below 85°; indeed, rarely below 90° F. At first the baths are given with an intermission every second day, then every third, later every fourth day, and still later every fifth day. The course of baths lasts from four to six weeks. After the bath the patient should be rubbed dry with towels, remain indoors, and rest for an hour at least.—*The Post-Graduate*, 1898, No. 6, p. 437.

[We recommend the perusal of this paper in its entirety. The author has given the essentials freed from the superfluous details, which have been added for various reasons, and has avoided the extravagances of the earlier writers.—R. W. W.]

MEDICINE.

UNDER THE CHARGE OF

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The Length of the Incubation Stage in Typhoid Fever.—E. JANCKEN (*Wiener klinische Wochenschrift*, 1898, No. 27) had an opportunity of making an important observation. Certain troops marching through two small villages in which were a number of cases of typhoid fever, drank copiously of water given by the villagers. That infection was acquired in this way follows from the absence of other exposure. Moreover, other troops passing through without pausing to drink remained free from infection. Of the thirty-six cases the symptoms appeared suddenly in all, with headache, chill, fever, severe diarrhœa, abdominal pain, and weakness. The course was mild, and defervescence occurred in the third week. The beginning of the disease was noted in three men on the second day (*i. e.*, two days after infection), in seven on the third day, in six on the fourth, four on the sixth, five on the seventh, in the other seven between the ninth and fourteenth days. This shows that under favorable conditions the typhoid bacilli can produce symptoms within two days. In the cases observed the favorable conditions consisted in great fatigue, excessive thirst, and the ingestion of considerable quantities of the infected water. That the germs were not of unusually great virulence may be supposed from the mild form of the disease.

The Diazo-reaction.—KROKIEWICZ (*Wiener klinische Wochenschrift*, 1898, No. 29) has made an extensive series of observations (more than sixteen thousand tests in eleven hundred cases) on this test, covering a great variety of diseases. Of many of the results it is not necessary to speak here. Suffice it to say that in most diseases examined the reaction was rarely or never present. An interesting result was that in kidney disease (except in the case of chrysarobin poisoning) the test was never employed. Even in cases of tuberculosis, with chronic nephritis or amyloid disease, the reaction was absent. In malaria the reaction was sometimes obtained in the acute febrile stage; in the chill it was always absent. The author found that the diazo-reaction occurring in pulmonary tuberculosis indicates a bad prognosis. The reaction is sometimes present before bacilli can be detected. Cases in which the reaction occurred with slight lesions ran a rapidly fatal course. Gangrene of the lungs in the course of tuberculosis seems to prevent the reaction. In tuberculosis of the mucous membranes, the lymph glands, the motor and genito-urinary tracts, the reaction is often absent altogether or in part of the course. In miliary tuberculosis the reaction is always present, but may become less intense just before death. In typhoid fever, even in abortive cases, the reaction is always present in the first and second stages. Later it becomes less intense or is absent. The reaction in this disease may be looked on as a symptom, and so long as it is present the disease cannot be considered as subsiding, even if the course at the time seems favorable. The reappearance of the test in convalescence almost always indicates a recidive. In cases of doubt between cancer of the stomach and intestinal tuberculosis the constant absence of the reaction points to cancer. The author made experiments with the toxins of tuberculosis, typhoid, erysipelas, and pus, with negative results, and is inclined to ascribe the reaction to unknown products of cell metabolism.

A Crural Venous Murmur.—RICHARD GEIGEL (*Münchener med. Wochenschrift*, 1898, No. 27) notes an observation that has an important bearing on the double murmur (Duroziez's) heard over the femoral artery in aortic regurgitation. (Geigel also finds the double murmur not rarely in chlorosis, and as a rule with the *pulsus celer*). According to him, if the stethoscope is pressed about ten seconds hard enough to cause a systolic murmur over the femoral artery, and then the pressure suddenly released, a murmur can be heard, long or short, blowing or even musical. It sometimes lasts several seconds. On account of the duration he claims the murmur is venous; moreover, when short it is not synchronous with the arterial diastolic murmur still audible with light pressure. So a double arterial murmur may be supposed to be present if the facts here described are not known, since the method of bringing out Duroziez's sign is similar to that mentioned. Geigel, whose studies of physical signs are always noteworthy, explains the murmur in the vein as follows: The pressure of the stethoscope on the